

MOL

The Mission  
Operations Laboratory



# MSFC Status

ExPCP #40

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Lori Manis  
Planning, Operations, and Analysis Branch/EO10  
256-544-2942  
lori.manis@nasa.gov



# ★ Accomplishments

## ◆ Preparing for increases in Utilization hours

- ◆ ISS Program direction is to prepare for “High Ops Tempo” to average ~70 hours/week with surges to 100hours/week (Current expectation is 35 hours per week minimum)

Increment Pair	USOS Utilization	NASA PL on RS crew
43/44	38:25 hrs/wk	85.5 hrs
45/46	38:19 hrs/wk	60.42 hrs
47/48	44:57 hrs/wk	32.5 hrs

- ◆ POIF Teams have partially implemented Special Study Team ops concepts by updating staffing, products, and processes.
- ◆ Removed CPS dependencies:
  - ◆ Data Set managed in WebAD
  - ◆ Planning, Scheduling, and RT re-planning done in Score
  - ◆ HDS utility removed; OPTIMIS Web Service utilized



# ★ Current Work

- ◆ Prepping for Inc. 49/50
  - ◆ Preliminary OOS TIM just completed at JAXA
  - ◆ Increment Pair TCO Lead implemented
  - ◆ Final OOS TIM Starts July 25<sup>th</sup>
- ◆ Special Study Team work continues to prepare for “High Ops Tempo” (details next charts)
- ◆ Revolutionize ISS for Science and Exploration (RISE) effort continues (separate presentation Tuesday)



# ★ Special Study Team Status

- ◆ Continuing to refine process updates for High Ops Tempo
- ◆ Teams in POIF are vetting ops concepts in both simulation and execution environments:
  - ◆ Simulation – late June – layout and communication assessment
  - ◆ Demo – mid-August – objectives and fidelity TBD
  - ◆ TCO staffing unchanged
    - ✦ Currently, plans are handed over to the POIF FCT at E-3 (Orbit3)
    - ✦ Full implementation sees plans handed over at E-1 (Orbit 3)
  - ◆ PREP TCO staffing updated
    - ✦ Currently, PREP TCO has additional help rotating each week
    - ✦ Full implementation = IL TCO + PREP TCO (3 total people dedicated to Inc pair; 2 PREP TCOs rotate weekly)
  - ◆ Additional PPM staffed for WLP development on weeks with >70 hours USOS crew time





# ★ Special Study Team Status

- ◆ Completed the first demo on April 11-15, 2016
- ◆ TCO:
  - ◆ Limited objectives were focused on internal communication and collaboration but also minimized plan review by the POIF FCT
  - ◆ Challenging to monitor RT support during dedicated plan reviews
- ◆ PPM:
  - ◆ Additional PPM for WLP development worked well
  - ◆ Exercised the roles of IL OC and IL DMC in WLP and E-7 timeline reviews
- ◆ Forward work for future demos:
  - ◆ Refine roles for IL TCO and PREP TCO
  - ◆ Continue to refine role of TCO as PCA-1 bridge for future timeline days
  - ◆ Add IL TCO into WLP and E-7 timeline review processes
  - ◆ Better define WLP and E-7 timeline review processes for PPM, IL OC, IL DMC and IL TCO



## ★ Revolutionize ISS for Science and Exploration

- ◆ Continuing to work on process updates for all aspects of NASA payload operations
- ◆ The current status including proposed updates to the OOS process will be presented on Tuesday afternoon



# ★ Future Work

- ◆ Complete Inc. 49/50 OOS development and begin console ops in mid-August
- ◆ Begin data collection for Inc. 51/52 in August
- ◆ Continue to refine process updates for RISE within NASA and with the Partners
- ◆ Continue to prepare for NASA utilization High Ops Tempo
  - ◆ Second demo week in August, with longer demos in the future
  - ◆ Staffing increases and training on-going
- ◆ Continue collaboration with ExPCP working groups to update documentation and improve planning processes